



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,867	08/30/2000	Suzanne P. Hassell	061607-1390	2151
24504	7590	11/29/2004	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			SCHUBERT, KEVIN R	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/650,867	HASSELL ET AL.
	Examiner Kevin Schubert	Art Unit 2137

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 February 2000.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-61 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-61 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 30 August 2000 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Claims 1-61 have been considered.

Title

5 It is advised that "Trouble Shooting" be changed to "Troubleshooting" as it appears throughout the application. Appropriate correction is suggested.

Abstract

10 The applicant is reminded of the proper language and format for an abstract. The abstract disclosed is too long and should be narrowed down.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The 15 abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

20

Drawings

25 The drawings are objected to under 37 CFR 1.84(o). The drawings lack suitable descriptive legends. Descriptive words should be put in the drawings to modify appropriate features. Appropriate correction is required.

Specification

Art Unit: 2137

A grammatical error appears in the second sentence of the sixth paragraph of the Background of the Invention. The sentence reads "Each user device 28 and 30, are connected". The sentence should read "Each user device 28 and 30 is connected". Appropriate correction is required.

5 A reference error occurs in the last sentence of the seventh paragraph of the Background of the Invention. DSL commonly refers to digital subscriber line, not digital subscribe loop as referred to by applicant.

10 In the eighth sentence of the thirteenth paragraph of the Background of the Invention, applicant refers to "VC 93" in Fig. 1. No reference to VC 93 is present in Fig. 1 or any of the accompanying drawings. The examiner assumes the applicant meant to write VC 92 instead of VC 93. Appropriate correction is required.

15 A reference error occurs in the fourth sentence of the first paragraph of the Summary of the Invention. DSLAM commonly refers to digital subscriber line access multiplexer, not digital subscriber loop access multiplexer as referred to by applicant.

20 In the second sentence of the thirty-first paragraph of the Detailed Description of the Preferred Embodiment, applicant refers to "Troubleshooting Portal 252" in Fig. 5. No reference to 252 is present in Fig. 5 or any of the accompanying drawings. The examiner assumes the applicant meant to write Troubleshooting Portal 100 instead of Troubleshooting Portal 252. Appropriate correction is required.

25 A grammatical error appears in the second sentence of the thirty-second paragraph of the Detailed Description of the Preferred Embodiment. The sentence reads "One embodiment of troubleshooting portal 100 have access". The sentence should read "One embodiment of troubleshooting portal 100 has access". Appropriate correction is required.

Art Unit: 2137

In the forty-third paragraph of the Detailed Description of the Preferred Embodiment, applicant refers to "communication system 304" in Fig. 7. Reference to communication system 304 is made in the second, third, fourth, and sixth sentences of the paragraph. No reference to 304 is present in Fig. 7. Reference to 304 is made in Fig. 6, but the reference is not to a communication system. The examiner 5 assumes the applicant meant to write communication system 344. Appropriate correction is required.

In the second to last paragraph of the Detailed Description of the Preferred Embodiment, applicant refers to "switch 150" in Fig. 2. Reference to switch 150 is made in the third, fourth, and fifth sentences. No reference to switch 150 is present in Fig. 2 or any of the accompanying drawings. The 10 examiner is unclear which switch the applicant meant to write. Appropriate correction is required.

Claim Objections

Claims 4,6,22,24,53. DSLAM commonly refers to digital subscriber line access modifier, not digital subscriber loop access as referred to by applicant.

15

Claims 47-53 are objected to because of the following informality: "trouble shooting" should be "troubleshooting" like it appears throughout the application. Appropriate correction is required.

Claim Rejections - 35 USC § 102

20 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

25 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

30

Claims 1-3,5,7-9,16-21,23,25-27,34-41,43-48,51-52,54-57,60-61 are rejected under 35 U.S.C. 102(e) as being unpatentable by Hassell, U.S. Patent No. 6,625,114.

As per claims 1,19, and 54, the applicant describes a method for providing connectivity between 5 a first device and a second device in an access provider network with the following steps which are anticipated by Hassell:

- a) providing access to a troubleshooting portal from a location associated with said first communication device (column 9, lines 6-15; column 9, lines 53-55);
- b) specifying to said troubleshooting portal a predefined identifier associated with said second 10 communication device (column 8, lines 56-60);
- c) associating said predefined identifier with said second communication device (column 9, lines 56-59);
- d) establishing connectivity between said first communication device and said second communication device based upon said specified predefined identifier (column 9, lines 6-15; column 10, 15 lines 38-40);

The applicant should note that an access provider communication system is defined in the applicant's specification as a "network that provides connectivity for communication devices" (page 4, lines 15-16). Hassell describes an "apparatus...for communicating data across a network" (column 8, lines 53-54) to communication devices.

20 The applicant should also note that Hassell discloses memory which has VC/SVC conversion logic to "drive the microprocessor to allow detection of transmitted data received from the router, acquire the DLCI, compare the address information of the DCLI with the VC/SVC address mapping information provided by the customer at configuration, check the state of an SVC, and transmit data across the appropriate SVC" (column 6, lines 59-67). The memory is therefore acting exactly like the 25 troubleshooting portal of the claimed invention.

Art Unit: 2137

As per claims 2, 20, 38, and 56, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

wherein said second communication device is an endpoint (column 8, lines 66-67; column 9, lines 1-3);

5 The applicant should note that the second port provides connectivity to the second device which is the endpoint on the network.

As per claims 3 and 21, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

10 wherein said step of establishing connectivity further includes the step of actuating at least one switch such that a plurality of physical links associated with a plurality of data link connection identifiers (DCLIs) are coupled together (column 4, lines 39-42);

As per claims 5 and 23, the applicant limits the independent claim, which is met by Hassell, with
15 the following limitation which is also met by Hassell:

wherein said step of establishing connectivity further includes the step of routing data over a plurality of physical links associated with said predefined identifier (column 9, lines 56-59);

As per claims 7, 25, and 43, the applicant limits the independent claim, which is met by Hassell,
20 with the following limitation which is also met by Hassell:

wherein said location is a site in a network service provider communication system (column 3, lines 10-25);

The applicant should note that in instances where the user has contracted with the access provider for service, the access provider would also be the network service provider as stated in the
25 applicant's specification (page 3, lines 10-12). In the lines referenced above, Hassell describes a system whereby a user has contracted with the access provider for service. The system of Hassell's invention is therefore both an access provider network and a service provider network.

As per claims 8,26, and 44, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

5 wherein said location is a site in said access provider communication system (column 8, lines 53-54);

The applicant should note that an access provider communication system is defined in the applicant's specification as a "network that provides connectivity for communication devices" (page 4, lines 15-16). Hassell describes an "apparatus...for communicating data across a network" (column 8, lines 53-54) to communication devices.

10

As per claims 9,27, and 55, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

 wherein said step of associating further includes the step of associating a predefined circuit identifier (ID) with said second communication device (column 9, lines 56-59);

15

As per claims 16,34,51, and 60, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

 wherein said step of accessing further includes the step of verifying, wherein a right to access is verified and the steps of specifying and establishing are implemented only after the right to access if 20 verified (column 7, lines 61-67);

As per claims 17,35, and 61, the applicant limits the independent claim, which is met by Hassell, with the following limitation which is also met by Hassell:

 wherein the steps of accessing, specifying, associating and establishing are defined as a session, 25 and wherein a plurality of sessions are implemented concurrently (column 11, lines 13-24 and column 12, lines 3-7);

Art Unit: 2137

The applicant should note that accessing is accomplished by "the virtual circuit/switched circuit address mapping being further based at least upon detection of a condition" (column 11, lines 18-20), specifying is accomplished by the "condition" (column 11, line 20), and associating and establishing are accomplished by "connecting said first port connected to said first virtual circuit with a second port connected to a second virtual circuit based at least on a virtual circuit/switched virtual circuit address mapping" (column 11, lines 13-17).

The applicant should also note that a plurality of sessions can occur concurrently in Hassell's disclosed invention, and a priority scheme can allow for handling the sessions (column 12, lines 3-7).

10 As per claims 18,36,52, the applicant further limits the independent claims, which are met by Hassell (see above), with the following limitation which is met by Hassell:

15 further including the step of monitoring, wherein the step of monitoring monitors the activity between said first communication device and said second communication device, and further including the step of terminating wherein the step of terminating terminates connectivity after a predefined period of no activity (column 6, lines 38-43);

As per claim 37, all of the limitations are met by Hassell in claim 1 (see above) except the following limitations which are also met by Hassell:

20 a configuration module configured to establish connectivity between first communication device and said second communication device (column 6, lines 59-67);

a processor configured to instruct said configuration module (column 6, lines 53-54);

The applicant should note that the configuration module is the VC/SVC conversion logic which sets up the physical connection between the first and second communication devices.

25 As per claim 39, the applicant limits the independent claim, which is met by Hassell (see above), with the following limitation which is also met by Hassell:

Art Unit: 2137

wherein a portion of said access provider communication system is a frame relay based communication system (column 10, lines 54-55);

As per claim 40, the applicant limits the independent claim, which is met by Hassell (see above),

5 with the following limitation which is also met by Hassell:

wherein a portion of said access provider communication system is an asynchronous transfer mode (ATM) based communication system (column 10, lines 58-60);

As per claim 41, the applicant further limits the independent claim, which is met by Hassell (see

10 above), with the following which is also met by Hassell:

wherein a portion of said access provider communication system is an internet protocol (IP) based communication system (column 8, lines 36-41);

As per claim 45, the applicant further limits the independent claim, which is met by Hassell (see

15 above), with the following which is also met by Hassell:

further comprising an address table residing in a memory in communication with said processor, said address table containing a predefined endpoint associated with said second communication device, and wherein said user specifies to said processor said second communication device (column 9, lines 53-59);

20 As per claim 46, the applicant further limits claim 45, which is met by Hassell (see above), with the following which is also met by Hassell:

wherein said address table contains a plurality of predefined endpoints associated respectively with a plurality of second communication devices such that said user specifies to said processor one of

25 said plurality of endpoints (column 9, lines 53-59);

Art Unit: 2137

As per claim 47, the applicant further limits claim 45, which is met by Hassell (see above), with the following which is also met by Hassell:

wherein said address table contains data corresponding to a circuit map associated with said endpoint, and wherein said device configuration module instructs said switch to establish connectivity by 5 interpreting said circuit map (column 9, lines 53-59);

As per claim 48, the applicant further limits claim 37, which is met by Hassell (see above), with the following which is also met by Hassell

further comprising an assigned internet protocol (IP) address location residing in a memory in 10 communication with said processor, wherein said user specifies an IP address to be saved into said IP address location, and wherein said IP address is associated with said second communication device (column 9, lines 53-59);

The applicant should note that Hassell's state table is user configurable (column 6, line 65). This means that the user maps the VC/SVC conversion logic in the memory according to the destination 15 address (column 6, lines 59-67; column 9, line 1). Hassell also mentions that IP addressing can be used (column 8, line 38), so the "network address" (column 9, line 59) could be an IP address.

As per claim 57, the applicant further limits claim 54, which is met by Hassell (see above), with the following which is also met by Hassell:

20 wherein said series of instructions further includes associating a first internet protocol (IP) address with said predefined identifier (column 9, lines 56-59);

The applicant should note that Hassell mentions that IP addressing can be used (column 8, line 38), so the "network address" (column 9, line 59) could be an IP address.

25

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

Art Unit: 2137

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10 Claims 4,6,22,24,42, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hassell in further view of the applicant's admitted prior art.

As per claims 4,6,22,24, and 53, the applicant limits claims 3,5,21,23, and 37 respectively, which are met by Hassell (see above), with the following limitation which is met by Hassell in further view of the applicant's admitted prior art.

15 wherein said step of actuating at least one switch further includes the step of actuating a digital subscriber loop access multiplexer (DSLAM) connected to a plurality of second communication devices such that said second communication device associated with said specified identifier is connected by said step of establishing connectivity;

Applicant should note that though Hassell does not specifically reference a DSLAM, he does note
20 that a number of conventional network hardware components can be attached or utilized in his system. In fact, in applicant's summary of invention (page 8), the applicant implies that the DSLAM is prior art and not part of the particular invention applicant discloses. It is well known in the art that a DSLAM device is an efficient device for routing multiplexed traffic to a desired communication device. Hassell discloses that both the first port (column 8, lines 61-64) and the second port (column 8, lines 66-67; column 9, lines
25 1-3) relay multiplexed information. It would have been obvious to one of ordinary skill in the art at the time of the invention to add a DSLAM into Hassell's system to make the routing system for multiplexed information more efficient.

As per claim 42, the applicant limits the independent claim, which is met by Hassell (see above),
30 with the following limitation which is met by Hassell in further view of the applicant's admitted prior art:

Art Unit: 2137

wherein a portion of said access provider communication system is an a multiprotocol label switching (MPLS) based communication system;

Hassell leaves open the possibility of using a number of different communication systems. In the ninth paragraph of the Detailed Description of the Preferred Embodiment, the applicant writes that MPLS is a well-known communication system. It would have been obvious to one of ordinary skill in the art at the time of the invention to use MPLS in Hassell's system because MPLS is well known as a good communication system.

Claims 10,11,13,28,29,31, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassell in further view of Van Horne, U.S. Patent No. 6,128,601.

As per claims 10 and 28, the applicant limits the independent claims, which are met by Hassell (see above), with the following limitation which is met by Van Horne:

further including the step of assigning a first internet protocol (IP) address, wherein said first IP address corresponds to said second communication device (column 18, lines 41-45);

Hassell describes all the limitations of the independent claim. However, Hassell fails to describe IP address assigning. Van Horne describes a system similar to Hassell's where remote computers log onto a communication network, like the Internet, through a server which assigns IP addresses to the clients. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Van Horne with those of Hassell to create a system where clients are identified by designated IP addresses.

As per claims 11 and 29, the applicant limits claims 10 and 28 respectively, which are met by Hassell in further view of Van Horne (see above), with the following limitation which is met by Van Horne:

further including the step of associating a second IP address with said first IP address (column 11, lines 41-48);

Art Unit: 2137

Hassell in further view of Van Horne describes all the limitations of claims 10 and 28, respectively. Van Horne describes a step of associating a second IP address with a first IP address. According to Van Horne, once an IP address has been assigned the IP address is processed by server access control software to match the IP address of the client with that of its destination on a network, 5 which will have a second IP address on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Van Horne with those of Hassell to create a system where one device with one IP address is associated with another device with a second IP address.

10 As per claims 13,31, and 49, the applicant further limits claims 10,28, and 48 respectively, which are met by Hassell in further view of Van Horne (see above), with the following limitation which is met by Van Horne:

wherein the step of assigning said first IP address is assigned by an access provider (column 18, lines 41-45);

15 Hassell in further view of Van Horne satisfies all the limitations of claims 10, 28, and 48 (see above). Van Horne also discloses a system where the step of assigning the first IP address is done by an access provider. Van Horne discloses that a client request for an IP address is regulated by server software or an access control module regulated by an access provider in a provider network. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings 20 of Van Horne with those of Hassell to create a system where an access provider monitors the assigning of IP addresses because such a system would be more secure.

As per claims 14,32, and 50, the applicant further limits claims 10, 28, and 48 respectively, which are met by Hassell in further view of Van Horne (see above), with the following limitation which is met by 25 Van Horne:

wherein the step of assigning said first IP address is assigned dynamically from a plurality of predefined unassigned IP addresses (column 11, lines 33-36);

Art Unit: 2137

Hassell in further view of Van Horne satisfies all the limitations of claims 10, 28, and 48. Van Horne also discloses a step of a first IP address being dynamically assigned from a plurality of predefined unassigned IP addresses so that IP addresses are conserved as much as possible. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Van Horne with those of Hassell to create a system where IP addresses are assigned dynamically to conserve IP addresses.

5 Claims 12,30, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassell in further view of Van Horne in further view of Hasenstein, (Diplomarbeit: IP Network Address Translation. 10 1997. pages 1-13).

As per claims 12,30, and 58, the applicant limits claims 10, 28, and 57 respectively, which are met by Hassell in further view of Van Horne (see above), with the following limitation which is met by Hasenstein:

15 further including the step of associating said first IP address by network address translation with one of a plurality of predefined addresses (Introduction);

Hassell describes a system where a user can access a plurality of communication devices.

Hassell in further view of Van Horne meets all the limitations of claims 10, 28, and 57 with Van Horne adding the additional component of IP address assigning. However, Hassell in further view of Van Horne 20 fails to describe a system where network address translation is used to assign IP addresses. According to Hasenstein in his Introduction, network address translation is an efficient way to circumvent IP shortage in a network situation, such as the one created by Hassell. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Hasenstein with those of Hassell in further view of Van Horne to use network address translation to circumvent IP shortage.

25

Claims 15,33, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassell in further view of Van Horne in further view of Sheresh, (Proxy Server 2.0. April, 1999. pages 1-5).

Art Unit: 2137

As per claims 15,33, and 59, the applicant further limits claims 10,28, and 57 respectively, which are met by Hassell in further view of Van Horne (see above), with the following limitation which is met by Sheresh:

5 further including the step of associating said first IP address by proxy with one of a plurality of predefined IP addresses;

Hassell in further view of Van Horne satisfies all the limitations of claims 10, 28, and 57.

However, Hassell in further view of Van Horne fails to disclose the use of a proxy to associate a first IP address with one of a plurality of predefined IP addresses. Sheresh discloses three benefits to using a 10 proxy server, including the benefit of IP address aggregation and management. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sheresh with those of Hassell in further view of Van Horne and add a proxy server for benefits including IP address aggregation and management.

15 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where 20 this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should 25 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Caldwell
Andrew Caldwell